Appl. No.: 10/675,580

Filing Date: September 30, 2003

Group Art Unit: 3775 Examiner: James L. Swiger III

Atty. Docket No.: 101896-696 (DEP5077USNP)

AMENDMENTS TO THE CLAIMS

- 1. (Previously Presented) An intervertebral fusion device, comprising:
 - (a) a body having a proximal portion along a major axis of the body and a distal portion along the major axis and wherein the body defines a conduit substantially parallel to the major axis, said conduit extending throughout the body; and
 - (b) a support at the distal portion that is configured to support vertebrae in a distracted position while the vertebrae fuse and wherein the support includes a conduit in fluid communication with the conduit defined by the body and having at least one outlet on a surface of the support,

wherein the distal portion of the body is configured to selectively engage the support and at least a portion of the body or the support has a height distinct from a width taken along a cross-section of the portion of the body or support perpendicular to the major axis, whereby the portion of the body or support can distract vertebrae, between which the portion of the body or the support has been placed, by rotation of the body or the support about the major axis.

- 2. (Previously presented) The intervertebral fusion device of Claim 1, wherein at least a part of the distal portion of the body has a height distinct from a width taken along the cross-section of the body, whereby the body can distract vertebrae between which at least the part of the distal portion has been placed by rotation of the body about the major axis.
- 3. (Previously Presented) The intervertebral fusion device of Claim 1, wherein the support is at least one member selected from the group consisting of a cage, a balloon and a ramp.
- 4. (Previously Presented) The intervertebral fusion device of Claim 1, wherein the support is a cage.
- 5. (Previously Presented) The intervertebral fusion device of Claim 4, wherein the cage substantially maintains natural angle between the distracted vertebrae.
- 6. (Previously Presented) The intervertebral fusion device of Claim 4, wherein the cage substantially maintains natural angle between the distracted vertebrae upon detachment of the body

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from the cage.

7-10. (Canceled).

11. (Previously Presented) The intervertebral fusion device of Claim 1, wherein the support

includes a balloon.

12. (Previously Presented) The intervertebral fusion device of Claim 11, wherein the support

further includes at least one material selected from the group consisting of morsellized autograft,

demineralized bone matrix, bone marrow aspirate, bone marrow concentrate, platelet-rich plasma,

hyaluronic acid, collagen, calcium phosphate cements, and bioabsorbable polymers.

13. (Previously Presented) The intervertebral fusion device of Claim 12, wherein at least one of

the morsellized autograft, demineralized bone matrix, bone marrow aspirate, bone marrow

concentrate, platelet-rich plasma, hyaluronic acid, collagen, calcium phosphate cements, and

bioabsorbable polymers are within the balloon.

14. (Canceled).

15. (Previously presented) The intervertebral fusion device of Claim 1, wherein the support has a

height distinct from a width taken along the cross section of the support, whereby the support can

distract vertebrae between which the support has been placed, by rotation of the body and the support

about the major axis.

16-23. (Canceled).

24. (Previously Presented) A kit for providing a fusion-promoting material comprising:

(a) an intervertebral fusion device, said device including

(i) a body having a proximal portion along a major axis of the body and a distal

portion along the major axis and wherein the body defines a conduit substantially

parallel to the major axis, said conduit extending throughout the body; and

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(ii) a support at the distal portion that is configured to support vertebrae in a distracted position while the vertebrae fuse and wherein the support defines a conduit in fluid communication with the conduit defined by the body and having at least one outlet on a surface of the support, wherein the distal portion of the body is configured to selectively engage the support and at least a portion of the body or the support has a height distinct from a width taken along a cross-section of the portion of the body or support perpendicular to the major axis, whereby the portion of the body or support can distract vertebrae, between which the portion of the body or the support has been placed, by rotation of the body or the support about the major axis; and

- (b) a flowable material selected from the group consisting of morsellized autograft, demineralized bone matrix, bone marrow aspirate, bone marrow concentrate, platelet-rich plasma, hyaluronic acid, collagen, calcium phosphate cements, bioabsorbable polymers and bone growth.
- 25-36. (Canceled).
- 37. (Previously presented) The intervertebral fusion device of claim 1, wherein the support is semi-permeable.
- 38. (Previously presented) The intervertebral fusion device of claim 1, wherein the support is biodegradable.
- 39. (Currently Amended) An intervertebral fusion device, comprising:
 - (a) a body having a proximal portion along a major axis of the body and a distal portion along the major axis and wherein the body defines a conduit substantially parallel to the major axis, said conduit extending throughout the body, and wherein at least a part of the distal portion of the body has a height distinct from a width taken along a cross-section of the body such that the body can distract vertebrae between which at least a part of the distal portion has been placed by rotation of the body about the major axis; and
 - (b) a selectively expandable balloon detachably connected to the distal portion of the body, the selectively expandable balloon being configured to support vertebrae in a distracted

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position while the vertebrae fuse and wherein an inner volume of the expandable balloon is in fluid communication with the conduit defined by the body, the balloon being formed of a biodegradable polymer.

40. (Previously presented) The intervertebral fusion device of claim 39, wherein the balloon is formed of a material selected from the group consisting of low-molecule weight polymers of lactic acid, glycolic acid, hydroxylated poly(glycolic-co-lactic) acid, collagen, and oxidized regenerated cellulose.